Amendments To The Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A system for selective thermal treatment of skin irregularities on a surface of the skin comprising:

(i) two [one] or more RF electrodes adapted to apply RF energy to the surface of the skin; and

(ii) a RF pulse generator configured to generate pulses of current in the RF range, the pulses having a duration of 2-500ms;

wherein the pulse of the RF current consists of a train of shorter pulses.

2. (Cancelled)

3. (Original) The system according to Claim 1 further comprising a cooling unit adapted to cool the skin.

4. (Original) The system according to Claim 3 wherein the cooling unit comprises a thermoelectric cooler.

5. (Previously Presented) The system according to Claim 1 further comprising a impedance meter for measuring an impedance across one or more of the RF electrodes.

6. (Original) The system according to Claim 5 further comprising a processor configured to determine a heat distribution in the skin based upon one or more impedance measurements.

7. (Original) The system according to Claim 6 wherein the processor is further configured to determine one or more parameters of the RF energy based upon one or more impedance measurements.

8. (Original) The system according to Claim 7 wherein the one or more parameters are selected from the group comprising a pulse duration of the RF energy, a frequency of the RF energy, a power of the RF energy, and a delay time between cooling the skin an application of the RF energy.

9. (Original) The system according to Claim 1 further comprising input means for determining one or more parameters of the RF energy.

10.   (Original)   The system according to Claim 9 wherein the one or more parameters are selected from the group comprising a pulse duration of the RF energy, a frequency of the RF energy, a power of the RF energy, a delay time between cooling the skin and application of the RF energy.

11.   (Previously Presented)   A method for selective thermal treatment of skin irregularities comprising:

(i) applying one or more RF electrodes to the skin; and

(ii)   generating current pulses in the RF range, the pulses having a duration in the range of 2-500ms;

wherein the pulse of the RF current consists of a train of shorter pulses.

12.   (Cancelled)

13.   (Original)   The method according to Claim 11 further comprising cooling the skin.

14.   (Original)   The method according to Claim 13 wherein cooling the skin involves cooling a fluid and allowing the fluid to flow near the skin.

15.   (Original)   The method according to Claim 13 wherein cooling the skin comprises involves a thermoelectric cooler.

16.   (Original)   The method according to Claim 11 further comprising measuring an impedance across one or more RF electrode pairs.

17.   (Original)   The method according to Claim 16 further comprising determining a heat distribution in the skin based upon one or more impedance measurements.

18.   (Original)   The method according to Claim 17 further comprising determining one or more parameters of the RF energy based upon one or more impedance measurements.

19.   (Original)   The method according to Claim 18 wherein the one or more parameters are selected from the group comprising a pulse duration of the RF energy, a frequency of the RF energy, a power of the RF energy, a delay time between cooling the skin an application of the RF energy.

20.   (Original)   The method according to Claim 11 wherein a frequency of the RF energy is from about 300 kHz to about 100 MHz.

21.   (Original)   The method according to Claim 11 wherein an output power of the RF energy is from about 5 to about 500 W.

22.   (Original)   The method according to Claim 11 wherein a pulse repetition rate is from about 0.1 to about 10 pulses per second.

23.   (Original)   The method according to Claim 11 further comprising hydrating the skin.

24.   (Original)   The method according to Claim 11 wherein the skin irregularity is selected from the group comprising a hair, a vascular or pigmented lesion and a collagen abnormality.